

Dominic Winski

Research Assistant Professor

Climate Change Institute & School of Earth and Climate Sciences, University of Maine
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Education

PhD Earth Science, Dartmouth College, May 2018

Dissertation: Alaskan and Antarctic Ice Cores as Archives of Holocene Climate Change
Advisor: Erich Osterberg

M.S. Quaternary and Climate Studies, University of Maine, August 2011

GPA: 3.96, Phi Kappa Phi

Thesis: Energy Balance and Snow Melt on the Kahiltna Glacier, Central Alaska Range
Advisor: Karl Kreutz

B.A. Earth Science, Geography. Dartmouth College, June 2009

GPA: 3.88, Summa Cum Laude, Phi Beta Kappa

Thesis: Quantitative Measurements of Spatial and Volumetric Recession of the Ablation Zone of Peyto Glacier, Alberta, Canada,
Advisor: Robert Hawley

Professional Interests

Ice core paleoclimatology, response of mountain glaciers to climate change, energy and mass balance modeling, temperature and precipitation reconstruction, stability of coupled climate systems, climate change adaptation, glaciological fieldwork and ice core drilling

Research and Academic Experience

Research Assistant Professor, University of Maine, Orono, ME

Jun. 2018-Present

Attempt to understand the response of natural climate systems to global change through publication of ice core research and writing grants

Research Assistant, Dartmouth College, Hanover, NH

Sept. 2013-May 2018

Use ice cores to reconstruct the paleoclimatic history of the North Pacific region and Antarctica

Ice Core Driller, South Pole Ice Core Project, Antarctica

Nov. 2015-Feb. 2016

Recover ice cores using an intermediate depth drill

Geologic Staff, Stantec Consulting, Hartford, CT

Jun. 2012-Aug. 2013

Interpret physical and chemical data to determine pollutant fate and transport

- Research Assistant, University of Maine, Orono, ME** *Aug. 2009-Aug. 2011*
 Model energy balance and melt layer formation on glaciers
 in Denali National Park, Alaska
- Core Handler, WAIS Divide Ice Core Project, Antarctica** *Nov. 2010-Feb. 2011*
 Measure, pack and ship ice core samples
- Lab Technician, Dartmouth College, Hanover, NH** *Feb.-Mar. 2008*
 Prepare and run samples for analysis by mass spectrometer
- Research Assistant, University of Maine, Orono, ME** *Jan.-Feb. 2008*
 Reconstruct paleo-topographical conditions using
 geomorphological models and mapping software

Published Research

Polashenski, D., Osterberg, E., Koffman, B., **Winski, D.**, Kreutz, K., Wake, C., Ferris, D., Introne, D., Campbell, S., Stamieszkin, K., Lewis, G., in review, Denali ice core methanesulfonic acid records north Pacific marine primary production, *Journal of Geophysical Research*, 123. <https://doi.org/10.1029/2017JD028123>

Winski, D., Osterberg, E., Kreutz, K., Wake, C., Ferris, D., Campbell, S., Baum, M., Bailey, A., Birkel, S., Introne, D., Handley, M. 2018. A 400 year record of summer temperature from melt layers in the Mt. Hunter ice core, Alaska, *Journal of Geophysical Research*, 123. <https://doi.org/10.1002/2017JD027539>

Bertler, N., et al. (71 authors including **Winski, D.**) 2018, The Ross Sea Dipole-temperature, snow accumulation and sea ice variability in the Ross Sea Region, Antarctica, over the past 2,700 years. *Climate of the Past*, 14, 193-214.

Winski, D., Osterberg, E., Ferris, D., Kreutz, K., Wake, C., Campbell, S., Hawley, R., Roy, S., Birkel, S., Introne, D., Handley, M. 2017. Industrial-age doubling of snow accumulation in the Alaska Range linked to tropical ocean warming, *Nature Scientific Reports*, 7(1), 17869.

Osterberg, E., **Winski, D.**, Kreutz K., Wake C., Ferris D., Campbell S., Introne D., Handley M., and Birkel S. 2017. 1200-Year Composite Ice Core Record of Aleutian Low Intensification. *Geophysical Research Letters*.

Kehrl, L., Hawley, B., Osterberg, E., **Winski, D.**, Lee, A. 2014. Volume loss from the lower Peyto Glacier, Alberta, Canada, between 1966 and 2010. *Journal of Glaciology*, 60(219).

Hooke, R., & **Winski, D.** 2014. Unroofing Maine: Relating pressure of crystallization, thermochronological data, tectonics, and topography. *Geomorphology*, 210, 36-47.

Koffman, B., Kreutz, K., Breton, D., Kane, E., **Winski, D.**, Birkel, S., & Handley, M. 2014. Centennial-scale variability of the Southern Hemisphere westerly wind belt in the eastern Pacific over the past two millennia. *Climate of the Past*, 10(3), 1125-1144.

Winski, D., Kreutz, K., Osterberg, E., Campbell, S., Wake, C. 2012. High-frequency observations of melt effects on snowpack stratigraphy, Kahiltna Glacier, Central Alaska Range. *Hydrological Processes*, 26(17), pp. 2573-2582.

Winski, D., Kreutz, K., Osterberg, E., Campbell, S., Wake, C. 2012. Effects of Melt on Snowpack Stratigraphy and Chemistry on the Kahiltna Glacier, Central Alaska Range. *Proceedings of the 68th Eastern Snow Conference*, pp. 67-88.

Campbell, S., Kreutz, K., Osterberg, E., Arcone S., Wake, C., Introne, D., Volkening, K., **Winski, D.** 2012. Melt Regimes, stratigraphy, flow dynamics and glaciochemistry of three glaciers in the Alaska Range. *Journal of Glaciology*, 58(207) pp. 99-109.

Campbell, S., Kreutz, K., Osterberg, E., Arcone S., Wake, C., Volkening, K., **Winski, D.** 2012. Flow dynamics of an accumulation basin: a case study of the Upper Kahiltna Glacier on Mount McKinley, Alaska. *Journal of Glaciology*. 58(207) pp. 185-195.

Manuscripts in Preparation

Hartman, L., Kurbatov, A., Davies, S., Dunbar, N., Fudge, T., Iverson, N., **Winski, D.**, Yates, M., Osterberg, E., Ferris, D., Fegyveresi, J. *in preparation*, SPICE Ice Core Cryptotephra Geochemistry Study of 1450's Kuwae Interval. to be submitted to *Nature Geoscience*, Anticipated submission Jun. 2018.

Winski, D., Osterberg, E., Ferris, D., Fudge, T., Fegyveresi J., Cole-Dai, J., Kurbatov, A., Iverson, N., Buizert C., Koffman, B., Kreutz, K. *in preparation*, The SPICEcore Holocene Chronology, *to be submitted to Climate of the Past*, Anticipated submission Jul. 2018.

Winski, D., Osterberg, E., Ferris, D., Fudge, T., Fegyveresi J., Cole-Dai, J. *in preparation*, Southern Ocean sea ice and circulation changes linked to Holocene sea salt concentration in the South Pole ice core, *to be submitted to Geophysical Research Letters*, Anticipated submission Aug. 2018.

Research Grants

NSF Arctic Natural Sciences: OPP-1804099. Collaborative Research: *North Pacific Composite Ice Core Record of Wildfire-Climate Relationships over the past Millennium*. E. Osterberg (Lead PI), K. Kreutz (PI), C. Wake (PI), E. Saltzman (PI), J. Dibb (PI), **D. Winski Lead Author**, in review, 1/1/19 – 12/31/20

NSF Paleoclimate Program: AGS-1806422. EAGER: *Exploration of the Denali Basal Ice Core Archive*, K. Kreutz (Lead PI), **D. Winski Lead Author**, Total Grant: **\$95,794**, 4/1/18 – 3/1/19

Mitchell Institute Fellowship: *Student Based Climate Research in Downeast Maine*, **D. Winski Lead PI**, Total Grant: **\$500**, 9/1/17-8/31/18

NSF East Asia and Pacific Summer Institute (EAPSI) Fellowship. IIA-1414610: *Changes in South Pacific Climate as Archived in the Roosevelt Island Black Carbon Record*. **D. Winski Lead PI**, Total Grant: Total Grant: **\$5,070**, 6/1/14-5/31/15

Mitchell Institute Fellowship: *Collaborative Ice Core Research in New Zealand and Australia*, **D. Winski Lead PI**, Total Grant: **\$700**, 9/1/17-8/31/18

Churchill Exploration Fund: *Spatial Extrapolation of Melt and Mass Balance in the Central Alaska Range*, **D. Winski Lead PI**, K. Schild (Co-PI), Total Grant: **\$5000**, 4/1/11-7/1/11

Churchill Exploration Fund: *Energy Balance and Snow Melt at Kahiltna Base Camp, Denali National Park*, **D. Winski Lead PI**, S. Campbell (Co-PI), Total Grant: **\$5000**, 4/1/10-7/1/10

Selected Awards and Honors

Best Student Paper Award, *Best paper within Earth Sciences for the Academic Year*, 2018

Earth Science Presentation Award, *Award to present at a professional conference*, 2015

Earth Science Research Award, *Additional funding (\$3000) to pursue PhD research*, 2014

Phi Kappa Phi, *Outstanding GPA in University of Maine Master's Program*, 2011

Graduate Student Government Award, *Award to present at professional conferences*, 2010-2011

Kingsley Brown Award, *Merit scholarship to pursue graduate work in science*, 2009

Summa Cum Laude, *Top 5% of graduating class*, Dartmouth College, 2009

Phi Beta Kappa, *Outstanding GPA in Dartmouth College undergraduate program*, 2009

John Ebers Award, *Most outstanding earth science undergraduate*, 2009

Earle Lenker Award, *Outstanding academic achievement*, 2008

Relevant Coursework

Glaciology	Remote Sensing	Paleoclimatology
GIS	Environmental GIS	Quaternary Science
Environmental Chemistry	3D Numerical Modeling	Meteorology
MATLAB Programming	Oceanography	Geomorphology
Advanced Statistics	Differential Equations	Hydrogeology

Scientific Field Experience

- St. Elias Glaciological Reconnaissance, Yukon Territory, Canada
May 2016
- South Pole Ice Core Project, Antarctica
Nov. 2015 – Feb. 2016
- Mt. Hunter Ice core drilling project, Denali National Park, AK,
May-June 2013

- May-June 2014 (leader)*
- May-June 2015 (leader)*
- June 2016 (leader)*
- June 2018 (leader)*
- Hydrogeological Characterization of Contaminated Sites, CT
June 2012-August 2013
- Avian Reproductive Biology in Scarborough Marsh, ME
Summer 2011-2012
- Glaciological Expedition to Kahiltna Glacier, Denali National Park, AK
May-June 2010, May 2011,
- West Antarctic Ice Sheet Divide Ice Core Project, West Antarctica
Nov. 2010 – Feb. 2011
- Alpine Lake Paleocology in the Beartooth Mountains, MT/WY
Aug. 2010
- Peyto Glacier Geophysical Expedition, Banff, AB, Canada
Jul. 2008
- Snowpack Ground Truthing Expedition, High Tatras, Poland/Slovakia
Apr. 2008
- Earth Science Field Research, Western U.S.
Aug. 2007 – Nov. 2007

Technical and Computer Skills

ArcGIS
Quantitative Melt Layer Stratigraphy
Time Series Analysis
Ion Chromatography

Ice Core Drilling
MATLAB
Campbell Scientific Data Loggers
Ice Core Melter Systems

Invited Lectures

University of Maine at Machias, 2018, *The Future of Downeast Maine: How science can help our communities prepare for change.*

University of New Hampshire, 2018, *Industrial-age doubling of snow accumulation in the Alaska Range is linked to tropical ocean warming.*

East Machias Public Lecture, 2017, *Climate Change Research and the Future of Washington County.*

International Arctic Science Committee Workshop, 2017, *Alaska Snowfall Doubling from Tropical Ocean Warming.*

Talkeetna Alaska Lodge, 2016, *Climate Science in the Alaska Range.*

American Geophysical Union Fall Meeting, 2015, *Denali Ice Core record of Alaska Summertime Temperature over the past Millennium.*

Science Outreach and Public Education

Involving K-12 Students in Research

-Student Based Climate Research in Downeast Maine, 2017-2018

Guided middle and high school students in collecting, analyzing and presenting water isotope data in precipitation

-Energy balance During the Vernal Transition, 2018

Helped teach high school students the concepts of snowpack energy balance as they design sensors to measure spring snow conditions

Public Lectures

- Talkeetna Ranger Station, 2018, *Climate Research in Denali National Park*
- Upper Valley Food Co-op, 2016, *Climate Change in the Upper Valley: Past, Present, and Future*
- Lubec Memorial Library, 2016, *Climate Change Research and the Future of Lubec, Maine*
- Talkeetna Alaska Lodge, 2015, *Climate Research in Denali National Park*
- Lubec Memorial Library, 2011, *Life in Antarctica and the importance of ice core research*

K-12 Lectures

- Delaware Valley High School, 2017, *Climate and Glacier Research*
- Washington Academy, 2017, *Climate Change Research and the Future of Washington County*
- Whiting Village School, 2014, *Ice core research and climate change*
- Washington Academy, 2014, *Climate research and local environmental change*
- Cobscook Community Learning Center, 2014, *Climate and glacier research*
- Whiting Village School, 2013, *Science and exploration on glaciers in Alaska*
- Whiting Village School, 2012, *The geography of the Andes in South America*
- Whiting Village School, 2011, *The natural environment and way of life in Antarctica*
- Washington Academy, 2011, *Ice cores, climate research and the Antarctic way of life*

Selected Media Coverage

- 18 Apr 2018, Glacier Loss is Accelerating because of Global Warming, by John Abraham, *The Guardian*
- 11 Apr 2018, Global warming is causing an Alaskan glacier to melt at the fastest pace in 400 years, by Doyle Rice, *USA Today*

- 11 Apr 2018, Scientists Warn Alaskan National Park Glaciers are Melting Faster than they have for 400 Year, by Kashmira Gander, *Newsweek*
- 19 Dec 2017, Scientists Stunned by Massive Snowfall Increases Among Alaska's Highest Peaks, by Chris Mooney, *The Washington Post*
- 19 Dec 2017, Increasing Ocean Temperatures Have Doubled Snowfall Around North America's Tallest Peaks, Study Says, by Linda Lam, *The Weather Channel*
- 19 Dec 2017, North America's Tallest Mountains Have Twice as Much Snow This Year Due to Warming Oceans, by Sydney Pereira, *Newsweek*
- 20 Dec 2017, Climate Change has Doubled Snowfall in Alaska, by Chelsea Harvey, *Scientific American*

Professional Presentations

Winski, D., Osterberg, E., Kreutz, K., Wake, C., Ferris, D., Campbell, S., Baum, M., Bailey, A., Birkel, S., Introne, D., Handley, M. 2017, A 400-year ice core melt layer record of summertime warming in the Alaska Range, AGU Fall Meeting (San Francisco, CA).

Kreutz, K., Campbell, S., **Winski, D.**, Osterberg, E., Kochtitzky, W., Copland, L., Dixon, D., Introne, D., Medrzycka, D., Main, B., Bernsen, S., Wake, C. 2017, Sub-annual North Pacific hydroclimate variability since 1450 AD from updated St. Elias ice core isotope and accumulation rate records, AGU Fall Meeting (San Francisco, CA).

Granville, C., Osterberg, E., **Winski, D.**, Kreutz, K., Wake, C., Campbell, S., Ferris, D. 2017, Synoptic Conditions and Tropical Forcing of Summer Melt Events at the Denali Ice Core Drill Site, AGU Fall Meeting (San Francisco, CA).

Polashenski, D., Osterberg, E., **Winski, D.**, Kreutz, K., Wake, C., Ferris, D., Introne, D., Campbell, S. 2017, Denali Ice Core MSA: A Record of North Pacific Primary Productivity, AGU Fall Meeting (San Francisco, CA).

Chesler, A., Koffman, B., Kreutz, K., Osterberg, E., **Winski, D.**, Ferris, D., Cole-Dai, J., Wells, M., Handley, M. 2017, Annually resolved Holocene record of dust deposition and size distribution from the South Pole, AGU Fall Meeting (San Francisco, CA).

Jongebloed, U., Osterberg, E., Kreutz, K., Ferris, D., Campbell, S., Saylor, P, **Winski, D.**, Handley, M. 2017, Elevational and Spatial Gradients of Atmospheric Metal Pollution in the North Pacific, AGU Fall Meeting (San Francisco, CA).

Winski, D., Ferris, D., Osterberg, E., Fudge, T.J., Fegyveresi, J., Cox, T., Cole-Dai, J., Koffman, B., 2017, Establishing an annually-resolved timescale in the South Pole ice core using ion and particle data, SPICEcore Science Meeting (Seattle, WA).

Fudge, T.J., Ferris, D., Osterberg, E., **Winski, D.**, Fegyveresi, J., Kurbatov, A., Iverson, N., Dunbar, N., Cole-Dai, J., Buizert, C., Bay, R., Brook, E., Severinghaus, J., Sowers, T., 2017, SPICEcore Timescale: Stratigraphic matching, SPICEcore Science Meeting (Seattle, WA).

Buizert, C., Sowers, T., Brook, E., Severinghaus, J., Fudge, T.J., Ferris, D., Osterberg, E., **Winski, D.**, Fegyveresi, J., Kurbatov, A., Iverson, N., Dunbar, N., Cole-Dai, J., Buizert, C., Bay, R., 2017, SPICEcore Timescale: Delta-age and the gas age scale, SPICEcore Science Meeting (Seattle, WA).

Chesler, A., Koffman, B., Kreutz, K., Osterberg, E., **Winski, D.**, Ferris, D., Wells, M., Cole-Dai, J., Handley, M., 2017, Dust concentration, size distribution, and trace element characterization in the SPICEcore, SPICEcore Science Meeting (Seattle, WA).

McConnell, E., Osterberg, E., **Winski, D.**, Kreutz, K., Wake, C., Campbell, S., Ferris, D., Birkel, S., 2016, Evaluating Precipitation Elevation Gradients in the Alaska Range using Ice Core and Alpine Weather Station Records, AGU Fall Meeting (San Francisco, CA).

Winski, D., Osterberg, E., Ferris, D., Fudge, T.J., Fegyveresi, J., Cole-Dai, J., Kreutz, K., Koffman, B., 2016, A 5,000 year snow accumulation record from the South Pole Ice Core, AGU Fall Meeting (San Francisco, CA).

Osterberg, E., **Winski, D.**, Kreutz, K., Wake, C., Ferris, D., Campbell, S., Introne, D., 2016, An Ice Core Perspective on Aleutian Low Variability over the Common Era, AGU Fall Meeting (San Francisco, CA).

Kreutz, K., Osterberg, E., **Winski, D.**, Wake, C., Campbell, S., Introne, D., Ferris, D., 2016, Trends in North Pacific Ocean-Atmosphere Variability During the Common Era Inferred From a New Mt. Hunter (Denali, Alaska) 1200-Year Ice Core Stable Isotope Record, AGU Fall Meeting (San Francisco, CA).

Polashenski, D., Osterberg, E., Kreutz, K., **Winski, D.**, Wake, C., Ferris, D., Introne, D., Campbell, S., 2016, Denali Ice Core Record of North Pacific Sea Surface Temperatures and Marine Primary Productivity, AGU Fall Meeting (San Francisco, CA).

Osterberg, E., Ferris, D., **Winski, D.**, Fegyveresi, J., Fudge, T.J., Koffman, B., Kreutz, K., Cole-Dai, J., 2016, The Annual Layers and Paleoclimate Record Preserved in High-Resolution SPICEcore Chemistry and Microparticle Data, SPICEcore Science Meeting (La Jolla, CA).

Fegyveresi, J., Fudge, T.J., Ferris, D., **Winski, D.**, Alley, R., Osterberg, E., Waddington, E., Kreutz, K., Bay, R., Cole-Dai, J., 2016, Extending the SPICEcore Ice Timescale: Annual resolution to 734m (10.2ka) and volcanic matching 1078-1462m (19.7-39.3ka), SPICEcore Science Meeting (La Jolla, CA).

Ferris, D., Osterberg, E., **Winski, D.**, Cole-Dai, J., Fudge, T.J., Fegyveresi, J., 2016, Holocene Volcanic Record Potential from South Pole, SPICEcore Science Meeting (La Jolla, CA).

Winski, D., Osterberg, E., Fegyveresi, J., Fudge, T.J., Ferris, D., Cole-Dai, J., Evaluating the climate signal in the SPICE accumulation record during the last millennium, SPICEcore Science Meeting (La Jolla, CA).

Winski, D., Osterberg, E. C., Ferris, D., Wake, C., Kreutz, K., Campbell, S., 2015, Record of Rising 20th Century Snow Accumulation from the Denali Ice Core, AGU Fall Meeting (San Francisco, CA).

Osterberg, E., Wake, C., Kreutz, K., **Winski, D.**, Ferris, D., Introne, D., Campbell, S., Birkel, S., 2015 Denali Ice Core Record of North Pacific Hydroclimate, Temperature and Atmospheric Circulation over the Past Millennium, AGU Fall Meeting (San Francisco, CA).

Saylor, P., Osterberg, E. C., **Winski, D.**, Koffman, B., Kreutz, K., Wake, C., Campbell S., 2015. Investigating the 'Iron Hypothesis' in the North Pacific: Trans-Pacific Dust and Methanesulfonate (MSA) in the Denali Ice Core, Alaska, AGU Fall Meeting (San Francisco, CA).

Polashenski, D., Osterberg, E., **Winski, D.**, Ferris, D., Kreutz, K., Wake, C., Introne, D., 2015 Denali Ice Core Record of North Pacific Sea Surface Temperatures and the Pacific Decadal Oscillation, AGU Fall Meeting (San Francisco, CA).

Wake, C., Osterberg, E., **Winski, D.**, Ferris, D., Kreutz, K., Introne, D., Dalton, M., 2015, Establishing a Reliable Depth-Age Relationship for the Denali Ice Core, AGU Fall Meeting (San Francisco, CA).

Birkel, S., Osterberg, E., Kreutz, K., Wake, C., Campbell, C., **Winski, D.**, 2015, Using Reanalysis to Provide Circulation Context for Ice Cores Recovered from Mt. Hunter Plateau in Denali National Park, AGU Fall Meeting (San Francisco, CA).

Godaire, T., Kreutz, K., Burakowski, E., **Winski, D.**, Campbell, C., Wang, Z., Sun, Q., Hamilton, G., Birkel, S., Wake, C., Osterberg, E., Schaaf, C., 2015 Developing a Validated Long-Term Satellite-Based Albedo Record in the Central Alaska Range to Improve Regional Hydroclimate Reconstructions, AGU Fall Meeting (San Francisco, CA).

Kreutz, K., Campbell, S., Osterberg, E., Wake, C., **Winski, D.**, Roy, S., Koons, P., 2015, Geophysical approaches to improve Holocene ice core-based hydroclimate reconstructions in the Northeast Pacific, Presented at the Northeastern Section GSA - 50th Annual Meeting (Bretton Woods, NH).

Winski, D., Osterberg, E. C., Kreutz, K., Baum, M., Wake, C., 2015, Abrupt summer warming in the Alaska Range from melt layers in the Mt. Hunter ice core, Presented at the Northeast Glaciological Meeting (Woods Hole, MA).

Winski, D., Osterberg, E. C., Kreutz, K., Baum, M., Wake, C., 2015, Abrupt summer warming in the Alaska Range from melt layers in the Mt. Hunter ice core, Presented at the Northeastern Section GSA - 50th Annual Meeting (Bretton Woods, NH).

Saylor, P., Osterberg, E. C., Kreutz, K., Wake, C., **Winski, D.**, 2014. A storm-by-storm analysis of alpine and regional precipitation dynamics at the Mount Hunter ice core site, Denali National Park, central Alaska Range. Abstract 25248 presented at the AGU Fall Meeting (San Francisco, CA).

Winski, D., Osterberg, E. C., Kreutz, K., Baum, M., Wake, C., 2014. Melt layer stratigraphic evidence of increasing summer snow melt on Mt. Hunter, Alaska over the last 400 years. Abstract 21329 presented at the AGU Fall Meeting (San Francisco, CA).

Godaire, T., Kreutz, K., Hamilton, G., Burakowski, E., Campbell, S., **Winski, D.**, Wake, C., Osterberg, E., Markle, B., 2013. Examining the relationship between surface albedo and glacier mass balance in the Central Alaska Range. Abstract C21A-0620 presented at the AGU Fall Meeting (San Francisco, CA).

Winski, D., Kreutz, K., Osterberg, E., Campbell, S., Wake, C., 2011, Effects of melt on snowpack stratigraphy and chemistry on the Kahiltna Glacier, Central Alaska Range, 68th Eastern Snow Conference, Montreal QC, Canada.

Winski, D., Kreutz, K., Osterberg, E., Campbell, S., Wake, C., Arcone, S., Kelsey, E., Volkering, K., Hawley, R. 2011. Effects of Melt on Snowpack Stratigraphy and Chemistry on the Kahiltna Glacier, Central Alaska Range. 41st Annual Arctic Workshop, Cryosphere Processes and Hydrology Session, Montreal, QC, Canada.

Winski, D., Kreutz, K., Osterberg, E., Campbell, S., Wake, C., Arcone, S., Kelsey, E., Volkering, K., Hawley, R. 2011. Effects of Melt on Snowpack Stratigraphy and Chemistry on the Kahiltna Glacier, Central Alaska Range. Harold Borns Symposium, Orono, ME.

Osterberg, E.C., Kreutz, K., Wake, C., Campbell, S., Kelsey, E., **Winski, D.**, 2011. Alaskan alpine ice coring: recent work and future plans. Presented at the Midwest Glaciological Meeting (Hanover, NH).

Winski, D., Kreutz, K., Osterberg, E., Campbell, S., Wake, C., Arcone, S., Kelsey, E., and Volkening, K. 2010. Modeling Energy Balance and Melt Layer Formation on the Kahiltna Glacier, Alaska. 40th Annual Arctic Workshop, Glaciology Session, Winter Park, CO.

Winski, D., Kreutz, K., Osterberg, E., and Campbell, S. 2010. Modeling Energy Balance and Melt Layer Formation on the Kahiltna Glacier, Alaska. Midwest Glaciology Meeting, Woods Hole, MA.

Winski, D., Kreutz, K., Osterberg, E., and Campbell, S. 2010. Modeling Energy Balance and Melt Layer Formation on the Kahiltna Glacier, Alaska. Harold Borns Symposium, Orono, ME.

Winski, D., Kreutz, K., Osterberg, E., and Campbell, S. 2010. Modeling energy balance and melt layer formation on the Kahiltna Glacier, Alaska. Abstract C23A-0580 presented at the AGU Fall Meeting (San Francisco, CA).

Hawley, R.L., **Winski, D.**, Osterberg, E.C., 2009. Recent mass changes of Peyto Glacier, Alberta, from remote sensing and field measurements, Abstract C21D-461 presented at the AGU Fall Meeting (San Francisco, CA).

References

Erich Osterberg, Assistant Professor, Department of Earth Sciences, Dartmouth College, erich.osterberg@dartmouth.edu, HB 6105 Fairchild Hall, Hanover, NH 03755, 1-603-646-1096

Karl Kreutz, Associate Professor of Earth Sciences and Quaternary and Climate Studies, University of Maine, karl.kreutz@maine.edu, Stable Isotope Laboratory, 236 Sawyer Environmental Research Laboratory, 1-207-581-3011

Bob Hawley, Professor of Earth Sciences, Dartmouth College, bob.hawley@dartmouth.edu, HB 6105 Fairchild Hall, Hanover, NH 03755, 1-603-646-1425